

CLAIMS

What is claimed is:

1. A processor-based device, comprising:

a power supply to generate power for the processor-based device;

a peripheral connector to connect to a peripheral device; and

a control circuit coupled to the power supply and the peripheral connector, the control circuit being configured to control application of power from the power supply to the peripheral device when the peripheral device is connected to the peripheral connector while the power supply is generating power.

2. The processor-based device as recited in claim 1, wherein the control circuit is configured to disable access from the processor-based device to the peripheral device until voltage applied to the peripheral device from the power supply reaches a predetermined threshold.

3. The processor-based device as recited in claim 1, wherein the control circuit is configured to monitor voltage applied to the peripheral device from the power supply and to enable

access from the processor-based device to the peripheral device when the voltage reaches a predetermined threshold.

5 4. The processor-based device as recited in claim 1, wherein the control circuit receives a signal from the peripheral device when the peripheral connector is connected to the peripheral device, and wherein the control circuit is configured to control application of power to the peripheral device in response to the signal.

 5. The processor-based device as recited in claim 1, wherein the power supply comprises a battery.

 6. The processor-based device as recited in claim 1, comprising a processor in communication with the control circuit.

20 7. The processor-based device as recited in claim 1, wherein the processor-based device is a personal digital assistant.

8. The processor-based device as recited in claim 1, wherein the processor-based device is a desktop computer.

5 9. The processor-based device as recited in claim 1, wherein the processor-based device is a laptop computer.

10 10. The processor-based device as recited in claim 1, wherein the processor-based device is a server.

15 11. The processor-based device as recited in claim 1, wherein the processor-based device is an Internet appliance.

12. The processor-based device as recited in claim 1, wherein the processor-based devices is a cellular telephone.

20 13. A method for hot-plugging a peripheral device to a processor-based device, the method comprising the acts of:

detecting connection of a peripheral device to a processor-based device while the processor-based device is powered; and

controlling application of power from the processor-based device to the peripheral device in response to detecting connection.

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14. The method as recited in claim 13, comprising the acts of:

monitoring voltage applied to the peripheral device while controlling application of power; and

enabling access from the processor-based device to the peripheral device when the monitored voltage reaches a predetermined threshold.

15. The method as recited in claim 13, comprising the act of:

monitoring voltage applied to the peripheral device while controlling application of power; and

prohibiting access from the processor-based device to the peripheral device until the monitored voltage reaches a predetermined threshold.

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16. The method as recited in claim 13, wherein the act of controlling application of power comprises the act of limiting rise of voltage applied to the peripheral device from the processor-based device.

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17. The method as recited in claim 13, wherein the act of controlling application of power comprises the act of limiting rise of current supplied from the processor-based device to the peripheral device.

18. The method as recited in claim 13, comprising the act of connecting the peripheral device to the processor-based device.

19. The method as recited in claim 13, wherein the processor-based device is a desktop computer.

20. The method as recited in claim 13, wherein the processor-based device is a personal digital assistant.

21. The method as recited in claim 20, wherein the peripheral device is an option pack.

22. The method as recited in claim 13, wherein the peripheral device comprises a
5 storage device.

23. A processor-based system, comprising:

10 a processor-based device; and

15 a peripheral device comprising a first peripheral connector for coupling with the processor-
based device,

wherein the processor-based device comprises:

a power supply to generate power for the processor-based device;

20 a second peripheral connector configured to connect to the first peripheral
connector; and

a control circuit coupled to the power supply and the first peripheral connector, the
control circuit being configured to control application of power from the

power supply to the peripheral device when the first peripheral connector is connected to the second peripheral connector while the power supply is generating power.

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24. The system as recited in claim 23, wherein the control circuit is configured to limit rise of voltage applied to the peripheral device from the processor-based device.

25. The system as recited in claim 23, wherein the control circuit is configured to limit rise of current provided from the processor-based device to the peripheral device.

26. The system as recited in claim 23, wherein, while the control circuit is controlling application of power to the peripheral device, the control circuit is configured to monitor voltage applied to the peripheral device from the processor-based device and to disable access from the processor-based device to the peripheral device until the voltage reaches a predetermined threshold.

27. The system as recited in claim 23, wherein the peripheral device is configured to provide a signal to the control circuit upon connection of the first peripheral connector to the second peripheral connector, and wherein the control circuit is configured to initiate application of power to the peripheral device in response to the signal.

28. The system as recited in claim 23, wherein the processor-based device comprises a personal digital assistant.

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29. The system as recited in claim 23, wherein the processor-based device comprises a desktop computer.

30. The system as recited in claim 23, wherein the processor-based device comprises a server.

31. The system as recited in claim 23, wherein the processor-based device comprises an Internet appliance.

32. The system as recited in claim 23, wherein the processor-based device comprises a handheld computer.

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33. The system as recited in claim 23, wherein the processor-based device comprises a cellular telephone.

5 34. The system as recited in claim 28, wherein the peripheral device comprises an option pack.

35. The system as recited in claim 23, wherein the peripheral device comprises a storage device.

36. The system as recited in claim 35, wherein the storage device comprises a hard disk drive.

37. The system as recited in claim 23, wherein the peripheral device comprises a modem.